CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER 98-009
ADOPTION OF SITE CLEANUP REQUIREMENTS AND RESCISSION OF CLEANUP AND ABATEMENT ORDER NO. 97-047 FOR:

THE SHERWIN-WILLIAMS COMPANY

for the property primarily located at:

1450 SHERWIN AVENUE
EMERYVILLE
ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

1. **Site Location**: The Sherwin-Williams property is located at 1450 Sherwin Avenue in Emeryville, California approximately 2000 feet from San Francisco Bay and comprises approximately 10 acres. The Sherwin-Williams property is bounded by Horton Street to the east, Chiron property (the former "Rifkin Property") and Temescal Creek to the north, Sherwin Avenue to the south and railroad tracks to the west. The "Site" is currently defined as the Sherwin-Williams' property located at 1450 Sherwin Avenue and a portion of the adjacent former Rifkin Property, now owned by Chiron Corporation, located at 4525-4563 Horton Street, to which hazardous materials have migrated from the above-identified Sherwin-Williams property. The boundaries of the "Site" may be modified in the future based on the extent of pollutants defined during additional investigations. The approximate location of the Site is shown in Figure 1. The area is mixed use, comprising primarily industrial and commercial properties with some residential use.

2. **Site History**: The Sherwin-Williams Company owns and operates a coatings manufacturing plant located at 1450 Sherwin Avenue. The plant has been in operation since the early 1900s, manufacturing various types of coating products. Sherwin-Williams also produced lead-arsenate pesticides at the plant from approximately the 1920s until the 1940s. Sherwin-Williams' plant included an acid plant, oil tank storage facility, solvent tank storage facilities, alkyd resin manufacturing facility and a lacquer manufacturing facility. In 1987, Sherwin-Williams changed its manufacturing at the plant from oil-based products to water-based products. According to a previous report discussing historical site use of the Rifkin Property (Harding Lawson Associates 1992), previous owners or users of the Rifkin Property located northeast of the Sherwin-Williams property have utilized that property for industrial purposes. Several USTs were removed from both the Rifkin Property and a portion of the Site formerly owned by Southern Pacific Lines ("SPL") in the late 1980s and 1990s, which had been utilized by previous owners. The site histories for Sherwin-Williams and other nearby properties will be evaluated as part of the site investigation.

3. **Named Dischargers**. The Sherwin-Williams Company is named as the discharger because

it owned the property and operated the Sherwin-Williams plant at the time of the discharge(s) of hazardous substances occurred thereon and currently owns such property. These hazardous substances from the discharge at the Sherwin-Williams plant have migrated off the Sherwin-Williams property onto other areas of the Site.

If additional information is submitted indicating that other parties caused or permitted any hazardous substances to be discharged where it entered or could have entered waters of the State within the Site vicinity, the Board will consider adding such parties to this Order or addressing the matter separately.

4. **Regulatory Status**: This site has been subject to the following Board Orders:

- Cleanup and Abatement Order (CAO) No. 97-047 adopted April 7, 1997.
- General Waste Discharge Requirements Order No. 94-087, NPDES Permit No. CAG912003, issued March 15, 1995.

This Order supersedes Cleanup and Abatement Order (CAO) No. 97-047. CAO No. 97-047 is rescinded by this Order. On June 24, 1997, pursuant to California Health & Safety Code ' 25260 et. seq., Sherwin-Williams submitted a Request to the California Environmental Protection Agency (Cal/EPA) for Designation of Administering Agency, seeking the appointment of the Board as the administering agency for the Site identified herein. In Cal/EPA Resolution 97-12, dated July 31, 1997, Sherwin-Williams' request was granted. Contained in this Resolution is the requirement that a Consultative Workgroup be formed. The Board has formed such a group which includes representatives of support agencies, the City of Emeryville, adjacent property owners and the community. The Consultative Workgroup shall be given the opportunity to review and comment on reports submitted pursuant to this Order.

5. **Site Hydrogeology**: Information regarding the hydrogeologic characteristics of the lithologic units that underlie the Site has been obtained from the drilling and pump testing conducted during previous investigations at the Sherwin-Williams facility and the Rifkin Property. The results of drilling indicate that shallow "A-zone" groundwater is generally encountered at a depth of 6 to 12 feet bgs. The results of drilling A-zone monitoring wells indicate A-zone groundwater is generally present in (2 to 8 feet thick) discontinuous and heterogeneous beds of sand and/or gravel interbedded with less permeable silty clayey sediments. The A zone is underlain by a generally silty clay interval with some interbedded sands and gravels that typically starts at approximately 15 to 20 feet bgs and is approximately 10 to 18 feet thick. This clay-rich interval has a low permeability, and the unit is believed to act as an aquitard to form a confining layer that reduces hydraulic and chemical migration from the A zone to the B zone. The B zone consists of a thick interval of well-sorted, course-grained, sand and gravel units interbedded with some silty clay sediments. B-zone groundwater is generally encountered at a depth of approximately 28 to 44 feet bgs.

6. **Remedial Investigation**: Several voluntary phases of soil and groundwater investigation have been conducted at the Site. The phases were conducted under the oversight of the

RWQCB for the Sherwin-Williams property from 1989 to 1991 to assess the nature and extent of a range of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and certain inorganic compounds (mostly arsenic and lead) detected at the Site as a result of the investigation of the tank storage and production facilities.

Soil investigations have included the following areas:

- Former oil tank storage.
- Former solvent tank storage.
- A paved parking area near the former solvent tank storage.
- Arsenic source area.
- The southern portion of the Rifkin Property.
- Portions of Horton Street.

VOCs, SVOCs including total petroleum hydrocarbons (TPHs), and metals, primarily arsenic, were identified in A zone groundwater at the Site. Recent B zone groundwater monitoring data has indicated possible downward migration of contaminants. However, the extent of any impact on the B zone will have to be determined with additional investigations.

The following pollutants and maximum concentrations have been found in previous investigations of soil and groundwater at the site (note: the concentrations below are maximums detected and are not necessarily representative of average concentrations across the Site):

Soil: arsenic 110,000 mg/kg; lead 49,000 mg/kg; MEK 77 mg/kg; acetone 2,200 mg/kg; benzene 1 mg/kg; ethylbenzene 1,500 mg/kg; toluene 14,000 mg/kg; and, total xylenes 9,900 mg/kg.

Groundwater: arsenic 740 mg/l; lead .015 mg/l; MEK 1700 mg/l; acetone 2,500 mg/l; benzene .95 mg/l; ethylbenzene 8 mg/l; toluene 330 mg/l; total xylenes 210 mg/l; TPHg 160 mg/l; and, TPHd 12 mg/l.

Periodic groundwater monitoring of on-site and off-site groundwater monitoring wells has been conducted at the Site since 1989. Groundwater samples have been collected periodically for chemical analysis and measurement of groundwater elevations. Soil and groundwater investigations were conducted on the Rifkin Property between 1993 and 1996. VOCs and arsenic were identified in soil and A zone groundwater in the southern portion of the Rifkin Property. TPH and their constituents were also detected. Soil and groundwater investigations at the BGR property (formerly Shell Development Facility), portions of which are upgradient of the Site, also identified the BGR property as a potential source of contaminants impacting groundwater.

Sherwin-Williams submitted a workplan, dated June 2, 1997, with amendments and clarifications dated September 10, 1997, to the Executive Officer to define the vertical and lateral extent of soil and groundwater pollution (the "Workplan"). The Workplan specifies

investigation methods and a proposed time schedule. The Workplan also identifies a task for evaluation of current site conditions including review of historical investigation reports and data for the Site to evaluate past chemical usage, subsurface lithology and hydrogeology, and soil and groundwater quality at the investigation area. In addition, the Workplan includes a human-made conduit evaluation addressing the identification of the existence, location, and condition of surface and subsurface human-made conduits at the Site. Work may be phased to allow the investigation to proceed efficiently, and additional investigation(s) may be proposed based on the results of the investigation identified in the Workplan.

7. **Interim Remedial Measures:** IRMs for the Sherwin-Williams property were presented in Levine-Fricke-Recon's report, "Evaluation of Interim Remedial Measures," dated December 20, 1991. In a letter dated March 10, 1992 the Executive Officer, stated that he did not object to implementation of IRMs recommended in the report. Sherwin-Williams subsequently modified and implemented the following IRMs under RWQCB staff oversight:

- Installed a slurry wall to contain chemically affected areas in the A zone aquifer in an attempt to prevent off-site migration of affected groundwater.

- Constructed a cap and storm-water collection system in an attempt to prevent infiltration of water from precipitation and storm-water runoff into chemically affected soils.

- Installed a groundwater extraction and treatment system to pump groundwater within the slurry wall in an attempt to create an inward hydraulic gradient and treat extracted groundwater.

In 1994 and 1995, activities were conducted to remove underground storage tanks (USTs) owned by SPL and located near the western Sherwin-Williams property line (adjacent to SPL railroad lines) that were discovered during Sherwin-Williams property remediation construction work.

The objectives of the IRMs were to reduce or eliminate potential human exposure to affected soil and groundwater, prevent or minimize off-site migration of the affected groundwater, and control source areas. More recent water level and analytical data indicate higher groundwater elevations inside the slurry wall relative to the outside of the slurry wall, which may be due to a water source within the slurry wall. Sherwin-Williams is currently evaluating potential water sources within the wall and the adequacy and effectiveness of the IRMs. Continued extraction and treatment of groundwater is necessary to prevent further migration of pollutants.

Sherwin-Williams, beginning in mid-June 1997, excavated and removed arsenic impacted soil identified along Horton Street, 45th Street, Sherwin Avenue and an adjacent residential property. The removal portion of the action was substantially completed by the end of July and completely finished (including replacement of sidewalks, etc.) by the end of September.

In October 1997, during an investigation of onsite stormdrains, Sherwin-Williams discovered that impacted groundwater was infiltrating the stormdrain system which flowed untreated to Temescal Creek. In Order to correct this discharge Sherwin-Williams sealed the outfall to the creek and began collecting stormwater which flowed into the system into above ground storage tanks where it could be stored prior to treatment via the groundwater treatment system. In order to isolate the stormdrains and prevent commingling of storm and groundwaters, a multi-point stormwater collection system was designed and implemented as an interim measure. This system consists of steel inserts which have been placed into each of the onsite catchment basins to prevent any runoff water from entering the existing stormdrain system. Within each of these inserts a pump has been placed which moves runoff water to Temescal Creek via surface piping.

8. **Adjacent Sites:** The Sherwin-Williams facility is located at 1450 Sherwin Avenue. The former Shell Development property is located upgradient and immediately to the east on Horton Street. The Rifkin Property is to the northeast of Sherwin-Williams and its former address was 4525 through 4623 Horton Street. The Rifkin Property is now an asphalt-covered parking lot with the exception of a building on the northern portion of the property. Harcros Pigments Facility, former Myer's Container Corporation, and IKEA Corporation (formerly Barbary Coast Steel) are to the west and downgradient of the Sherwin-Williams facility across the railroad tracks. The Southern Pacific Railroad tracks run in an approximate north-south direction between The Sherwin-Williams facility and the three facilities west of the railroad tracks (Harcros Pigments, Myer's Container Corporation, and Barbary Coast Steel). The concrete-lined Temescal Creek runs in an approximate east-west direction adjacent to the northern part of the Sherwin-Williams property and drains into the Bay. Industrial companies that historically operated outside of the Sherwin-Williams property may be potential sources of contamination found on portions of the Site.

9. **Public Participation:** Pollutants from the Sherwin-Williams plant have migrated onto adjacent properties owned and operated by others. A Public Participation Plan is necessary to allow these impacted adjacent property owners as well as other owners, tenants and concerned parties to remain informed and participate in the site investigation and remediation process. In addition, the Board shall seek timely comments on all reports and actions relevant to this Order from all interested agencies and parties, and shall consider those comments. Unless otherwise determined by the Executive Officer, all interested agencies and parties shall have 15 calendar days from the date of submittal to review and comment on reports submitted pursuant to this Order.

10. **Basin Plan:** The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board' s master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

The potential beneficial uses of groundwater underlying and adjacent to the Site include:

a. Municipal and domestic water supply
b. Industrial process water supply
c. Industrial service water supply
d. Agricultural water supply

At present, there is no known use of groundwater underlying the Site for the above purposes.

The existing and potential beneficial uses of Temescal Creek include:

a. Water contact and non-contact recreation
b. Wildlife habitat
c. Cold freshwater and warm freshwater habitat
d. Fish migration and spawning

11. **Other Board Policies:** Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible. During the previous NPDES permit application process, Sherwin-Williams demonstrated that it was technically infeasible to discharge treated groundwater to the EBMUD sewer system (based on EBMUD discharge requirements) or to reclaim the water. Sherwin-Williams recently reapplied and on December 1, 1997 was granted a one year permit to discharge the treated water to the EBMUD sewer system.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high total dissolved solids (TDS), low yield, or naturally-high contaminant levels.

12. **State Water Board Policies:** State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

13. **Preliminary Cleanup Goals:** The discharger will need to make assumptions about future cleanup standards for soil and groundwater, in order to determine the necessary extent of

remedial investigation, interim remedial actions, and the draft cleanup plan. Pending the establishment of site-specific cleanup standards, derived via a site-specific risk assessment, the following preliminary cleanup goals should be used for these purposes:

a. Groundwater: As a minimum concentrations should not exceed applicable water quality objectives (e.g. maximum contaminant levels, or MCLs) or, in the absence of a chemical-specific objective, risk-based levels (e.g., drinking water equivalent levels).
b. Soil: 1 mg/kg total volatile organic compounds (VOCs), 10 mg/kg total semi-volatile organic compounds (SVOCs), and background concentrations of metals.

14. **Basis for 13304 Order:** The discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

15. **Cost Recovery:** Pursuant to California Water Code Section 13304, the discharger is hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.

16. **CEQA:** This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of California Environmental Quality Act pursuant to Section 15321 Title 14, California Code of Regulations.

17. **Notification:** The Board has notified the discharger and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.

18. **Public Hearing:** The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the discharger (or its agents, successors, or assigns) shall clean up and abate the conditions described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.

2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. TASKS

1. HEALTH AND SAFETY PLAN

COMPLIANCE DATE: 45 days after adoption of this Order

Submit a technical report acceptable to the Executive Officer containing a health and safety plan for the Site. The plan shall be prepared pursuant to OSHA Regulations, particularly those in Title 29 CFR 1910.120 and Title 8 CCR 5192 as well as other applicable federal, state and local statutes. This plan will be updated to account for additional field work as needed .

2. PUBLIC PARTICIPATION PLAN

COMPLIANCE DATE: 45 days after adoption of this Order.

Submit a technical report acceptable to the Executive Officer containing a public participation plan (plan) for the Site. The plan shall be consistent with the DTSC guidance document entitled Public Participation Policy and Procedures Manual (EO-94-002-PP, rev. February 1, 1997).

3. QUALITY ASSURANCE PROJECT PLAN (QAPP)

COMPLIANCE DATE: 75 days after adoption of this Order.

Submit a technical report acceptable to the Executive Officer setting forth a QAPP for the site. The QAPP shall include the following:

a. Project organization and responsibilities with respect to sampling and analysis;
b. Quality assurance objectives for measurement including accuracy, precision, and method detection limits. In selecting analytical methods, the discharger shall consider obtaining detection limits at or below potential regulatory criteria such as MCLs, MCLGs, PRGs, or concentrations which represent an acceptable risk, etc.;
c. Sampling procedures;
d. Sample custody procedures and documentation;
e. Field and laboratory calibration procedures;
f. Analytical procedures;
g. Laboratory to be used certified pursuant to H&SC Section 25198;
h. Specific routine procedures used to assess data (precision, accuracy and completeness) and corrective action;
i. Reporting procedures for measurement of system performance and data

quality;

j. Data management, data reduction, validation and reporting;

k. Internal quality control; and,

l. Data Quality Objectives.

4. **EVALUATION OF EXISTING INTERIM REMEDIAL MEASURES**

COMPLIANCE DATE: 90 days after adoption of this Order.

The discharger shall submit a technical report acceptable to the Executive Officer evaluating the performance of the IRMs previously implemented and currently operating on the Sherwin-Williams property. Sherwin-Williams shall continue to operate the groundwater extraction and treatment system to create and maintain an inward hydraulic gradient within the slurry wall. Modifications to the current IRMs, if any, shall be proposed in a workplan which includes an implementation schedule. This workplan shall be included within this submittal.

5. **INTERIM REMEDIAL ACTIONS**

COMPLIANCE DATE: See text below

If during the course of remedial investigation, interim remedial actions are necessary to mitigate the release of hazardous substances at or emanating from the Site, or to protect public health or welfare or the environment, the discharger shall immediately consult with the Board. If determined necessary by the Executive Officer, the discharger shall submit to the Board in a timely manner an acceptable workplan including an implementation schedule and implement the workplan.

6. **COMPLETION OF INTERIM REMEDIAL ACTIONS**

COMPLIANCE DATE: To Be Determined Based on the schedule approved by the Executive Officer in Task 4 and 5 above.

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 4 and 5 workplan(s). For any groundwater extraction remedial actions, the report should document the start-up and effectiveness of the groundwater system.

7. **COMPLETION OF EVALUATION OF CURRENT SITE CONDITIONS, SITE USE HISTORY AND HUMAN-MADE CONDUITS**

COMPLIANCE DATE: 120 days after the adoption of this Order.

Submit a technical report acceptable to the Executive Officer documenting completion of the tasks relating to evaluation of current site conditions and completion of an evaluation of human-made conduits identified in the "Workplan", submitted pursuant to Cleanup and Abatement Order 97-047 (June 2, 1997, with amendments and clarifications dated September 10, 1997). The technical report

should:

a) compile data collected in previous investigations to provide a comprehensive summary of all investigation work completed to date;
b) inventory chemicals used on the Site (by name and volume) and identify all pollution sources on the Site, including chemical storage areas, sumps, underground tanks, utility lines, process lines, and related facilities;
c) identify surface and subsurface human-made conduits at the Site that may allow contaminants to migrate laterally off site or vertically into deeper aquifers;
d) modify and/or add to the investigation identified in the "Workplan" based on the findings. Any additions or modification to the "Workplan" will contain implementation schedules acceptable to the Executive Officer.

8. **COMPLETION OF REMEDIAL INVESTIGATION**
COMPLIANCE DATE: See text below

The discharger shall implement the "Workplan" dated June 2, 1997, with amendments and clarifications dated September 10, 1997 in accordance with the schedule outlined in the Workplan and any additional amendments as found to be acceptable to the Executive Officer. Initiation of the schedule set forth in the "Workplan" on the date of the approval of the Quality Assurance Project Plan described in Task 3. above. Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the "Workplan" and any amendment as found to be acceptable to the Executive Officer. The technical report shall define the vertical and lateral extent of soil and groundwater pollution emanating from the site down to concentrations at or below the Preliminary Remediation Goals set forth in this Order or as deemed acceptable by the Executive Officer.

9. **RISK ASSESSMENT**
COMPLIANCE DATE: 60 days after approval of Remedial Investigation Report

Submit a technical report acceptable to the Executive Officer containing a Risk Assessment prepared consistent with: U.S. EPA Risk Assessment Guidance for Superfund (EPA/540/1-89/002); as further supplemented by DTSC Supplemental Guidance for Human Health Multimedia Risk Assessment of Hazardous Waste Sites and Permitted Facilities; and/or additional guidance as considered acceptable to the Executive Officer.

10 **TREATABILITY STUDIES**
COMPLIANCE DATE: Prior to or concurrent with Task 11, or as appropriate

If necessary, treatability studies will be performed by the discharger to develop data for the remedial alternative. Treatability testing is required to demonstrate the

implementability and effectiveness of the technologies unless the discharger can present documentation, acceptable to the Executive Officer, that similar data, documentation or information exists. The required deliverables are: a workplan with an implementation schedule, a sampling and analysis plan and a treatability evaluation report.

11. **PROPOSED FINAL REMEDIAL ACTIONS AND CLEANUP STANDARDS**
COMPLIANCE DATE: 60 days after approval of Task 9.

Submit a technical report acceptable to the Executive Officer containing:

a. A summary of the results of the remedial investigation
b. Evaluation of the installed interim remedial actions
c. Feasibility study evaluating alternative final remedial actions as well as their compliance with federal state and local requirements
d. Risk assessment to evaluate the risk associated with each alternative as well as risk associated with the implementation of each alternative
e. Recommended final remedial actions and cleanup standards
f. Recommended implementation tasks and time schedule.

Item c shall include projections of cost, effectiveness, benefits, and impact on public health, welfare, and the environment of each alternative action.
Items a through c should be consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), CERCLA guidance documents with respect to remedial investigations and feasibility studies, Health and Safety Code Section 25356.1(c), and State Board Resolution No. 92-49 as amended ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304").

Items a through e should consider the preliminary cleanup goals for soil and groundwater identified in finding 13.

12. **Delayed Compliance:** If the discharger is delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the discharger shall promptly notify the Executive Officer and the Board may consider revision to this Order.

C. **PROVISIONS**

1. **Monthly Summary Reports:** On a monthly basis, the discharger shall submit a Monthly Summary Report of activities undertaken pursuant to this Order. Each report shall describe: (a) specific actions taken by or on behalf of the discharger during the previous month; (b) actions expected to be taken during the current month; and, (c) planned activities for the next month. These reports shall be submitted no later than the 15th day of the month following the month in which the

work was completed. In addition, these reports shall identify any obstacle which threatens compliance with the requirements of this Order and what actions are being undertaken to overcome such obstacles. Should non-compliance with the Order occur, the discharger shall provide written notice to the Board which clarifies the reasons for the non-compliance and proposes specific measures to be taken and a schedule to achieve compliance. This written notice shall identify work not completed that was projected for completion, and the impact of the non-compliance on achieving compliance with the remaining requirements of this Order.

2. **Notification of Field Work:** The discharger shall inform the Board at least 5 days in advance of all field sampling conducted pursuant to this Order.

3. **No Nuisance:** The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).

4. **Good Operation and Maintenance (O&M):** The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

5. **Cost Recovery:** The discharger shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the Site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

6. **Access to Site and Records:** In accordance with California Water Code Section 13267(c). the discharger shall Permit the Board, or its authorized representatives:
   a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
   b. Access to copy any records required to be kept under the requirements of this Order.
   c. Inspection of any monitoring or remediation facilities installed in response to this Order.
   d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
   e. The discharger shall maintain a central depository of the data, reports and other non-privileged documents prepared pursuant to this Order.

7. **Self-Monitoring Program:** The discharger shall comply with the Self-Monitoring

Program as attached to this Order and as may be amended by the Executive Officer.

8. **Contractor/Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.

9. **Lab Qualifications:** All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).

10. **Document Distribution:** Copies of all correspondence, technical reports, and other documents submitted to the Board pertaining to compliance with this Order shall be provided to the following entities:

    a. City of Emeryville
    b. County of Alameda, Department of Environmental Health

This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

13. **Rescission of Existing Order:** This Order supersedes and rescinds Cleanup and Abatement Order No. 97-047.

14. **Periodic SCR Review:** The Board will review this Order periodically and may revise it when necessary. The discharger may request revisions and upon review the Executive Officer may recommend that the Board revise these requirements.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 18, 1998.

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Loretta K. Barsamian
Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments: Figure 1, Site Map
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

THE SHERWIN-WILLIAMS COMPANY

for the property primarily located at:

1450 SHERWIN AVENUE
EMERYVILLE
ALAMEDA COUNTY

1. **Authority and Purpose:** The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 98-009 (Site Cleanup Requirements).

2. **Monitoring:** The discharger shall measure groundwater elevations quarterly in all monitoring wells and piezometers, and shall collect and analyze representative samples of groundwater quarterly from the following wells:

   Sherwin-Williams site and off-site (except Rifkin)

   - A-zone wells LF-3, LF-8, LF-11, LF-12, LF-13, LF-17, LF-18, LF-19, LF-20, LF-21, LF-23, LF-24, and LF-25, and LF-26
   - B-zone wells LF-B3, LF-B4, LF-B5, LF-B6
   - A-zone extraction wells Ex-1, Ex-2, and Ex-3

   Rifkin Property

   - A-zone wells RP-1, RP-2, RP-3, RP-4, RP-5, MW-1, MW-2, MW-3, MW-4, and MW-5

   All groundwater samples shall be analyzed for arsenic using EPA Method 7060, VOCs using EPA Method 8260 (including Acetone, 2-Butanone, and 4-methyl-2-pentenone), TPH as gasoline using EPA Method 5030, TPH as diesel using EPA Method 3510, and field pH. The discharger shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the same constituents as shown in the above table. The discharger may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

3. **Quarterly Monitoring Reports:** The discharger shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The reports shall include:

a. Transmittal Letter: The transmittal letter shall discuss any violations of the Site cleanup requirements during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year. Groundwater potential differences (a) across the slurry wall and (b) between the A and B aquifer zone will be tabulated and discussed in each quarterly report.

c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and on figures for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping -- below).

d. Groundwater Extraction: If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the Site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.

e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.

4. **Violation Reports:** If the discharger violates requirements in the Site Cleanup Requirements, then the discharger shall notify the Board office by telephone as soon as practicable once the discharger has knowledge of the violation. Board staff may, depending on violation severity, require the discharger to submit a separate technical report on the violation within five working days of telephone notification.

5. **Other Reports:** The discharger shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further

migration of contaminants or which would provide new opportunities for site investigation.

6. **Record Keeping:** The discharger or his/her agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.

7. **SMP Revisions:** Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the discharger. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on February 18, 1998.

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Loretta K. Barsamian
Executive Officer